

In the Claims:

This listing of claims replaces all prior versions and listings of the claims. The status of each claim is indicated. Please add new claims 40-45. Claims 1-43 are pending with claims 1, 10, 24, 34 and 35 being the independent claims. Amendments are shown with additions underlined and deletions in ~~striketrough~~ text or in [[double brackets]]. No new matter is added by these amendments.

1. (Currently Amended) An apparatus, ~~A pressure vessel unit~~ comprising:

a pressure vessel capable of being opened to receive a user and closed to create a hermetic seal;

said pressure vessel ~~including~~comprising an on-board interface capable of enabling a user to control one or more functions of said pressure vessel ~~unit~~, a pressure transducer capable of monitoring air pressure inside said pressure vessel, and a user sensor capable of measuring one or more parameters of a user's body condition, said user sensor being in electrical communication with said on-board interface;

a blower capable of removing air from said pressure vessel; and

a proportioning valve capable of controlling the amount of air allowed to enter into said pressure vessel,

said on-board interface configured to initiate a session of cyclic variations in altitude conditioning upon initiation by a user at a first time period, said session including a predetermined program configured to regulate cyclic variations of altitude within said pressure vessel,

said on-board interface configured to cause a change to said predetermined program at a second time period based on a signal received from said user sensor.

2. (Currently Amended) The ~~apparatus~~pressure vessel unit of Claim 1, wherein said on-board interface is placed in electrical communication with said blower, said proportioning valve and said pressure transducer, said on-board interface configured ~~being capable of enabling a user~~ to initiate said[[a]] session of cyclic variations in altitude conditioning by cyclically operating said blower to create a negative pressure in said pressure vessel and by cyclically operating said

proportioning valve to introduce air into said pressure vessel to reduce the negative pressure up to the point of atmospheric pressure.

3. (Currently Amended) The ~~apparatus~~pressure vessel unit of Claim 12, wherein said ~~user sensor is placed in electrical communication with said on-board interface, said on-board interface is configured to monitor being capable of monitoring readings~~ signals from said user sensor to determine whether at least one value associated with a measured parameter of a user's body condition is at a level sufficient ~~enough~~ to warrant a modification of ~~said~~[[a]] predetermined program regulating cyclic variations in altitude ~~within said pressure vessel conditioning~~.

4. (Currently Amended) The ~~apparatus~~pressure vessel unit of Claim 3, wherein said on-board interface is ~~capable of modifying~~ configured to modify [[a]]~~said~~ predetermined program regulating the cyclic variations in altitude within the pressure vessel conditioning if the readings at least one value of a measured parameter of a user's body condition is ~~deemed to be~~ at a level sufficiently outside a predetermined range for ~~said~~the selected predetermined program.

5. (Currently Amended) The ~~apparatus~~pressure vessel unit of Claim 13, wherein said session is a first session, said on-board interface is configured to cause said first session to be stopped and a second session different than said first session to be initiated during said second time period based on a signal received from said user sensor~~capable of selecting an alternate predetermined program for regulating the cyclic variations in altitude conditioning if the readings of a measured parameter of a user's body condition is deemed to be at a level sufficiently outside a predetermined range for the originally selected predetermined program~~.

6. (Currently Amended) The ~~apparatus~~pressure vessel unit of Claim 1, wherein an external controller is ~~placed in~~ electrical communication with said blower, said proportioning valve and said pressure transducer, said external controller configured ~~being capable of enabling a user to initiate~~ said a session of cyclic variations in altitude conditioning by cyclically operating said blower to create a negative pressure in said pressure vessel and by cyclically operating said

proportioning valve to introduce air into said pressure vessel to reduce the negative pressure up to the point of atmospheric pressure.

7. (Currently Amended) The ~~apparatus~~pressure vessel unit of Claim 6, wherein said user sensor is ~~placed in~~ electrical communication with said external controller, said external controller ~~being capable of monitoring~~configured to monitor signals readings from said user sensor to determine whether at least one value of a measured parameter of a user's body condition is at a level sufficient ~~enough~~ to warrant a modification of ~~said~~ a predetermined program regulating cyclic variations in altitude conditioning.

8. (Currently Amended) The ~~apparatus~~pressure vessel unit of Claim 7, wherein said external controller is configured to modify ~~the~~capable of modifying a predetermined program regulating the cyclic variations in altitude ~~conditioning if the readings of~~ if said at least one value of a measured parameter of a user's body condition is ~~deemed to be~~ at a level sufficiently outside a predetermined range for ~~said the selected~~ predetermined program.

9. (Currently Amended) The ~~apparatus~~pressure vessel unit of Claim 7, wherein said predetermined program is a first predetermined program, said external controller ~~is~~being configured to select ~~capable of selecting an alternate a second~~ predetermined program for regulating the cyclic variations in altitude conditioning when said at least one value if the readings of a measured parameter of a user's body condition is ~~deemed to be~~ at a level sufficiently outside a predetermined range for ~~the originally selected said first~~ predetermined program.

10. (Currently Amended) A system for cyclic variations in altitude conditioning comprising:
a pressure vessel unit;[[,]]
a kiosk controller;[[,]] and
a master controller,
said pressure vessel unit ~~including~~comprising a pressure vessel, a blower, and a
proportioning valve.

said pressure vessel capable of being opened to receive a user and closed to create a hermetic seal[[]], said pressure vessel including~~comprising~~ an on-board interface capable of enabling a user to control one or more functions of said pressure vessel unit, a pressure transducer capable of monitoring air pressure inside said pressure vessel[[]], and a user sensor capable of measuring one or more parameters of a user's body condition[[]],

said user sensor being in electrical communication with said on-board interface[[]], said on-board interface configured to initiate a session of cyclic variations in altitude conditioning upon initiation by a user at a first time period, said session including a predetermined program configured to regulate cyclic variations of altitude within said pressure vessel unit, said on-board interface configured to cause a change to said predetermined program at a second time period based on a signal received from said user sensor,

said[[a]]blower capable of removing air from said pressure vessel,~~;~~and

said[[a]] proportioning valve capable of controlling the amount of air allowed to enter into said pressure vessel;

said kiosk controller including~~comprising~~ a first software program, and an information processing system capable of executing said first software program, said kiosk controller ~~capable of being in electrical communication with~~ said master controller and said on-board interface,

said master controller including~~comprising~~ a second software program[,] and an information processing system capable of executing said second software program, ~~and~~ said master controller ~~capable of being in electrical communication with said on-board controller of~~ said pressure vessel unit.

11. (Currently Amended) The system of Claim 10, wherein said on-board interface is placed in electrical communication with said blower, said proportioning valve and said pressure transducer, said on-board interface being configured ~~capable of enabling a user to initiate~~ said[[a]] session of cyclic variations in altitude conditioning by cyclically operating said blower to create a negative pressure in said pressure vessel and by cyclically operating said proportioning valve to introduce air into said pressure vessel to reduce the negative pressure up to the point of atmospheric pressure.

12. (Currently Amended) The system of Claim 1011, wherein ~~said user sensor is placed in electrical communication with said on-board interface~~, said on-board interface is configured to monitor~~being capable of monitoring signals~~readings from said user sensor to determine whether at least one value associated with a measured parameter of a user's body condition is at a level sufficient enough~~to warrant a modification of said~~to warrant a modification of said~~predetermined program regulating cyclic variations in altitude conditioning within said pressure vessel unit.~~

13. (Currently Amended) The system of Claim 12, wherein said on-board interface is configured to modify said~~capable of modifying a predetermined program regulating the cyclic variations in altitude within said pressure vessel unit if said at least one value conditioning if the readings of a measured parameter of a user's body condition is deemed to be at a level sufficiently outside a predetermined range for said~~the selected predetermined program.

14. (Currently Amended) The system of Claim 12, wherein said session is a first session, said on-board interface is configured to cause said first session to be stopped and a second session different than said first session to be initiated during said second time period based on a signal received from said user sensor~~capable of selecting an alternate predetermined program for regulating the cyclic variations in altitude conditioning if the readings of a measured parameter of a user's body condition is deemed to be at a level sufficiently outside a predetermined range for the originally selected predetermined program.~~

15. (Currently Amended) The system of Claim 10, wherein said kiosk controller is ~~placed in electrical communication with said blower, said proportioning valve and said pressure transducer~~, said kiosk controller being configured~~capable of enabling a user to initiate said~~to initiate said~~session of cyclic variations in altitude conditioning by cyclically operating said blower to create a negative pressure in said pressure vessel and by cyclically operating said proportioning valve to introduce air into said pressure vessel to reduce the negative pressure up to the point of atmospheric pressure.~~

16. (Currently Amended) The system of Claim 15, wherein said user sensor is ~~placed in~~ electrical communication with said kiosk controller, said kiosk controller configured to monitor signals ~~being capable of monitoring readings from~~ said user sensor to determine whether at least one value of a measured parameter of a user's body condition is at a level sufficient ~~enough to~~ warrant a modification of said ~~[[a]]~~ predetermined program regulating cyclic variations in altitude conditioning.

17. (Currently Amended) The system of Claim 16, wherein said kiosk controller is configured to modify said ~~capable of modifying a~~ predetermined program regulating the cyclic variations in altitude ~~conditioning if said~~ at least one value ~~the readings of~~ a measured parameter of a user's body condition is ~~deemed to be~~ at a level sufficiently outside a predetermined range for said ~~the selected~~ predetermined program.

18. (Currently Amended) The system of Claim 16, wherein said predetermined program is a first predetermined program, said kiosk controller is configured to select a second ~~capable of selecting an alternate predetermined program for regulating the~~ cyclic variations in altitude ~~conditioning if the~~ said at least one value ~~readings of~~ a measured parameter of a user's body condition is ~~deemed to be~~ at a level sufficiently outside a predetermined range for ~~the originally selected~~ said first predetermined program.

19. (Currently Amended) The system of Claim 10, wherein said information processing system executing said first software program is configured to receive signals ~~capable of receiving readings from~~ said user sensor to determine whether at least one value of a measured parameter of a user's body condition is sufficient ~~enough to~~ warrant a modification of said ~~[[a]]~~ predetermined program regulating cyclic variations in altitude ~~conditioning~~, and making such modification if such measured parameter is ~~deemed~~ sufficient.

20. (Currently Amended) The system of Claim 10, wherein said information processing system executing said first software program is configured to receive signals ~~capable of receiving readings from~~ said user sensor to determine whether at least one value of a measured parameter

of a user's body condition is at a level sufficient ~~enough~~ to warrant a selection of an alternate predetermined program regulating cyclic variations in altitude ~~conditioning~~, and making such alternate selection if such measured parameter is deemed sufficient.

21. (Original) The system of Claim 10, wherein said master controller is located in a separate facility from said kiosk controller and said pressure vessel unit.

22. (Currently Amended) The system of Claim 10, wherein said master controller is configured to store~~capable of storing~~ user data entered into and stored on at least one of said kiosk controller or said on-board interface.

23. (Currently Amended) The system of Claim 22, wherein said master controller is configured to make said~~capable of making such~~ data stored on said master controller available to a second kiosk controller in electrical communication with said master controller, such that a user can ~~make use~~ said stored data to operate ~~of~~ a second pressure vessel unit in electrical communication with said second kiosk controller ~~without the need to reenter data already stored in said master controller.~~

24. (Currently Amended) A method of controlling a user's use of a system for cyclic variations in altitude conditioning, ~~said method comprising the steps of:~~

making a system for cyclic variations in altitude conditioning available to a user, ~~wherein~~ said system including, comprises

a pressure vessel unit,

a kiosk controller, and

a master controller,

said pressure vessel unit including, comprising

a pressure vessel capable of being opened to receive a user and closed to create a hermetic seal,[[;]]

said pressure vessel including~~comprising~~ an on-board interface capable of enabling a user to control one or more functions of said pressure vessel

unit, a pressure transducer capable of monitoring air pressure inside said pressure vessel₁[[;]] and a user sensor capable of measuring one or more parameters of a user's body condition₁[[;]] said user sensor being in electrical communication with said on-board interface[[;]], said on-board interface configured to initiate a session of cyclic variations in altitude conditioning upon initiation by a user at a first time period, said session including a predetermined program configured to regulate cyclic variations of altitude within said pressure vessel unit, said on-board interface configured to cause a change to said predetermined program at a second time period based on a signal received from said user sensor,

a blower capable of removing air from said pressure vessel₁[[;]] and

a proportioning valve capable of controlling the amount of air allowed to enter into said pressure vessel₁[[;]]

said kiosk controller including, comprising

a first software program, and

an information processing system capable of executing said first software program,

said kiosk controller ~~capable of~~ being in electrical communication with master controller and said on-board interface,

said master controller including, comprising

a second software program, and

an information processing system capable of executing said second software program, and

said master controller ~~capable of~~ being in electrical communication with said on-board controller; and

allowing said user to pay for a session of cyclic variations in altitude conditioning in said system via the entry of payment information relating to the user into said kiosk controller.

25. (Currently Amended) The method of Claim 24, further comprising ~~the step of:~~

~~transferring downloading to said master controller, data associated with a user stored on~~ from said kiosk controller to said master controller, wherein said data relates to a user and was previously entered and stored on said kiosk controller.

26. (Original) The method of Claim 25, wherein said master controller is located in a different facility from said kiosk controller.

27. (Currently Amended) The method of Claim 24, wherein the system is a first system, the kiosk controller is a first kiosk controller, the method further comprising the step of:

allowing a user to utilize a second system ~~including~~ comprising a second kiosk controller ~~without requiring the re-entry of data into said second kiosk controller by uploading data associated with said user~~ previously entered by a user from said master controller to said second kiosk controller.

28. (Currently Amended) The method of Claim 24, wherein the system is a first system, the kiosk controller is a first kiosk controller, the method further comprising the step of:

allowing a user to utilize a second system ~~including~~ comprising a second kiosk controller ~~without requiring the re-entry of data into said second kiosk controller by providing~~ making such data associated with the user previously entered by said [[a]] user at said first system available for access from said master controller by said second kiosk controller.

29. (Currently Amended) The method of Claim 24, further comprising the step of:

verifying a user's completion of a set-up session; and
after the verifying, allowing the user to initiate a ~~requiring a user to successfully complete a set up program in order to ensure that the user is capable of safely completing a regular session of cyclic variations in altitude conditioning.~~

30. (Currently Amended) The method of Claim 24, further comprising the step of:

accessing data related to a user from at least one of said kiosk controller or said master controller; and

based on said data, determining in order to determine a suitable program for the user based at least in part upon the user's history of use.

31. (Currently Amended) The method of Claim 25 , further comprising ~~the step of:~~
monitoring one or more parameters of the user's body condition to determine whether at least one value of a measured parameter of the user's body condition is at a level sufficient enough to warrant a modification of said[[a]] predetermined program regulating cyclic variations in altitude conditioning.

32. (Currently Amended) The method of Claim 31, further comprising ~~the step of:~~
modifying said predetermined program regulating the cyclic variations in altitude conditioning if said at least one value the readings of a measured parameter of a user's body condition is deemed to be at a level sufficiently outside a predetermined range for the selected said predetermined program.

33. (Currently Amended) The method of Claim 31, wherein the predetermined program is a first predetermined program, the method further comprising the step of:
selecting a secondan alternate predetermined program for regulating the cyclic variations in altitude conditioning if said at least one value the readings of a measured parameter of a user's body condition is deemed to be at a level sufficiently outside a predetermined range for the originally selected said first predetermined program.

34. (Currently Amended) A method for providing cyclic variations in altitude conditioning, comprising ~~the steps of:~~
~~evaluating and classifying a user into one of a predetermined number of body type categories;~~
~~enabling the user to successfully complete a set up session in a pressure vessel;~~
selecting a cyclic variations in altitude conditioning program based upon the user's categorization;

executing a session of cyclic variations in altitude conditioning within a pressure vessel,
~~said session including a predetermined program configured to cause~~~~enabling the user to~~
~~undergoing~~ rapid transitions between simulated altitudes in ~~said~~~~the~~ pressure vessel according to
cycles determined by said predetermined program;

~~using a user sensor to measure~~measuring via a user sensor at least one parameter of a
user's body condition during said session; and[[,]]

determining whether a value of said at least one~~the~~ measured parameter is within a
predetermined ~~desired~~ range, and if within said predetermined ~~such~~ range, allowing said
predetermined program to continue, and if not within said predetermined~~outside of such~~ range,
modifying said predetermined program in real time, said modification to provide the user with a
~~modified program in real time that will better match the needs of the user based at least in part~~
upon the user's categorization and said value of said at least one measured parameter~~current body~~
condition.

35. (Currently Amended) A method for providing cyclic variations in altitude conditioning,
~~said method comprising the steps of:~~

~~evaluating and classifying a user into one of a predetermined number of body type~~
categories;

~~enabling the user to successfully complete a set-up session in a pressure vessel;~~

selecting a cyclic variations in altitude conditioning program based upon the user's
categorization;

executing a first session of cyclic variations in altitude conditioning within a pressure
vessel, said first session including a first predetermined program configured to cause~~enabling the~~
~~user to undergoing~~ rapid transitions between simulated altitudes in ~~said~~~~the~~ pressure vessel
according to cycles determined by said first predetermined program;

~~using a user sensor to measure~~measuring via a user sensor at least one parameter of a
user's body condition during said first session; and[[,]]

determining whether a value of said at least one ~~the~~ measured parameter is within a
predetermined ~~desired~~ range, and if within said predetermined~~such~~ range, allowing said first
predetermined program to continue, and if not within said predetermined~~outside of such~~ range,

initiating in real time a second session of cyclic variations in altitude conditioning within said pressure vessel, said second session being different than said first session, said second session including a second predetermined program configured to cause~~enabling the user to undergoing~~ rapid transitions between simulated altitudes in ~~said~~the pressure vessel according to cycles determined by said second predetermined program;~~switching said program to provide the user with an alternative program in real time so that the alternative program will better match the needs of the user~~-based upon the user's categorization and current body condition.

36. (Currently Amended) The method of Claim 34, further comprising ~~the steps of:~~

~~requiring the user to provide payment information via an on-board interface prior to the~~
~~executing the session, receiving payment information via an on-board interface coupled to said~~
~~pressure vessel~~enabling the user to execute said cyclic variations in altitude conditioning
~~program.~~

37. (Currently Amended) The method of Claim 34, further comprising ~~the steps of:~~

~~prior to the executing said session, receiving~~requiring the user to provide payment
~~information via a kiosk controller coupled to said pressure vessel prior to enabling the user to~~
~~execute said cyclic variations in altitude conditioning program.~~

38. (Currently Amended) The method of Claim 35, further comprising ~~the steps of:~~

~~prior to the executing said first session, receiving~~requiring the user to provide payment
~~information via an on-board interface coupled to said pressure vessel prior to enabling the user to~~
~~execute said cyclic variations in altitude conditioning program.~~

39. (Currently Amended) The method of Claim 35, further comprising ~~the steps of:~~

~~prior to the executing said first session, receiving~~requiring the user to provide payment
~~information via a kiosk controller coupled to said pressure vessel prior to enabling the user to~~
~~execute said cyclic variations in altitude conditioning program.~~

40. (New) The apparatus of claim 1, wherein said pressure vessel includes an opening defined in a wall of said pressure vessel and said pressure vessel includes a panel disposed over said opening, said panel configured to rupture when a pressure within said pressure vessel exceeds a predetermined threshold pressure.
41. (New) The apparatus of claim 1, wherein said on-board interface is configured to receive user payment information to pay for a session of cyclic variations in altitude conditioning.
42. (New) The apparatus of claim 1, wherein said on-board interface is disposed inside said pressure vessel.
43. (New) The system of claim 10, wherein said on-board interface is disposed inside said pressure vessel.
44. (New) The method of claim 34, further including:
prior to the classifying, receiving data entered by a user; and
prior to the executing said session, executing a set-up session in said pressure vessel.
45. (New) The method of claim 35, further including:
prior to the classifying, receiving data entered by a user; and
prior to the executing said first session, executing a set-up session in said pressure vessel.